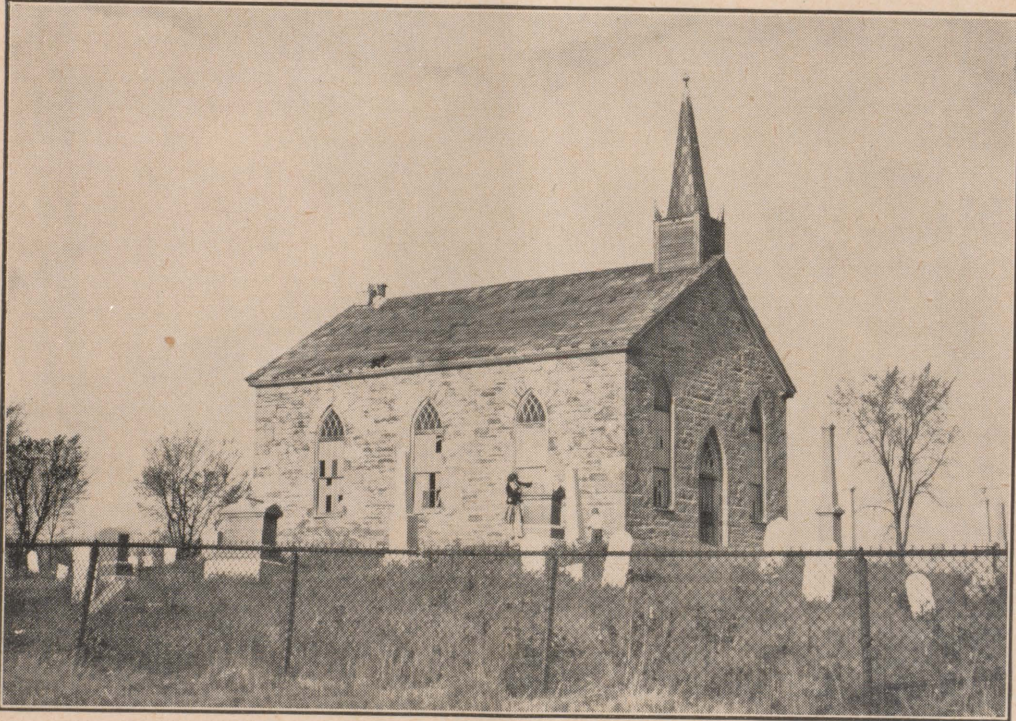


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Farm · Home · School



THE MACDONALD LASSIE



The Fight is Still On

It might have been expected that when the well-considered recommendations of the Massey Commission were presented the attacks on the CBC would have died down. But, they did not, and now as the time approaches for discussion of the recommendations in parliament, the nation-wide and amply-financed campaign of propaganda against the public system of radio continues in full swing — all, of course, “in the interests of the public”.

Again the sacred name of freedom is invoked. The alleged autocratic and tyrannical conduct of the Canadian Broadcasting Corporation is held up for public condemnation. The Corporation is in a difficult and unenviable position. It cannot defend itself in any public way, and government leaders apparently desiring to emphasize their non-interference with the detailed operation of the corporation seem to lean over backwards in their neutrality. The thousands of little people whose interests are at stake have no effective voice and many are confused or even misled by all the propaganda.

The idea of complete “freedom of the air” is a myth. With only one hundred wave lengths available on the continent, it is obvious that control is necessary and that the allocation of wave lengths confers a great privilege which involves responsibility and demands control in the public interest. There is no evidence that more control has been exerted than is necessary. In fact, the nearest to criticism of the CBC that the Massey Commissioners came, was to say that the corporation had not been strict enough with the private stations. To compare freedom of the press with freedom of the air is very wide of the mark. Anyone with money and means to secure newsprint and machinery could start a newspaper in every village in Canada which is obviously not the case with radio.

The Massey Commission met another contention of the private interests when it re-affirmed emphatically the basis established by the earlier Aird Commission

that radio in Canada should be treated as a public trust rather than as an industry as it is in the United States. Private stations could not afford to serve the sparsely settled areas of Canada which it is not commercially profitable to serve, and yet which in the national interest must have radio coverage. Private stations could not afford to provide for programmes like Farm Radio Forum and maintain the contacts with their listeners so vital in planning such programmes. And who but a public corporation would support foreign broadcasts which serve national interests and bring in no revenue? To provide for these functions the public corporation must be more than a “regulatory” body — it must be in the business itself.

The propaganda against the Commission recommendations frequently refers to the attempt to “foist culture” on an unwilling public. There are even quite unkind references to the commissioners as “long hairs”. The preamble to the report anticipates this charge — “We were asked whether it was our purpose to try to ‘educate’ the public in literature, music and the arts in the sense of declaring what was good for them to see and hear. We answered that nothing was further from our minds than the thought of suggesting standards in taste from some cultural stratosphere.” Thinking people know that democracy must be continually educating itself — must constantly be on the alert to preserve the best in its life.

Fair-minded observers admit that on the whole CBC has steered a clear middle course between the extremes of state monopoly in Britain and the other extreme of the American system, which in some respects verges on the chaotic. Similarly the claim that a “well-balanced and closely knit organization” has been achieved by the CBC seems well justified. Surely then, the time has come to end these ill-considered and unfair practices of nibbling at the CBC, of confusing the issues and to take the opportunity now offered to establish Canadian radio permanently as a public trust by implementing the recommendations of the Massey Commission.

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Good Management Practices are Essential for Profit

by L. H. Hamilton

High lamb and wool prices are leading to a re-awakening of interest in sheep production. Prof. Hamilton describes some of the points which will assure good flock management and more profits for the owner.

DURING September the first sale of breeding stock held at Sherbrooke for many years, saw three hundred head of sheep change hands at very satisfactory prices.

The present high prices for lamb and wool, the small labour and feed requirements and the abundance of roughage feed available would seem to have been responsible for the numerous enquiries and keen demand exhibited for breeding stock. Both Canadian and American buyers have shown interest in purebred and commercial sheep at many of our larger shows.

Since sheep production increases only at a slow rate, it is believed by people who should know, that the present conditions should hold for some time. Over the long run, however, prices may change and it would seem that the wise course to follow would be to concentrate on the breeding, feeding and management practices to be followed in producing a high quality product.

Most farmers have already purchased their foundation stock, and for this reason little can be said about the selection of the breeding stock which would be of immediate value.

Flock Condition During Breeding

It may be wise to emphasize at this point that the shepherd's harvest is mainly determined by the management practices adopted at breeding time. A flock in good condition will give a bigger lamb crop than one in poor condition and this result can be achieved through the use of good pasture or the addition of some grain. In the case of the ram, which is quite often confined in not too satisfactory quarters, a mixture of oats and barley or oats alone, plus some linseed oil meal and/or bran represents a satisfactory ration.

The time to breed depends upon the type or breed of sheep that is available. The larger breeds or types should be bred for the early market in May, June and July. These larger sheep grow faster, and if good feeders make surprising gains. They should be well looked after and marketed at about four months of age. This requires somewhat more feed and care but the early market is usually better and results in a greater margin of profit.

The smaller breeds, which require less grain and less attention except at lambing time, are bred later and will usually lamb about the middle of April. The lambs should



With the present high price of lamb and wool there are plenty of dollars in this field.

be ready for pasture about the time grass is available; marketing should begin during September.

The breeding practice followed by most farmers is to turn the ram in with the ewes. This procedure is satisfactory under commercial conditions. The main point to observe is to mark the ram so that one can be sure that the ewes are being settled. This marking can be done with ocre; simply smear some on the brisket of the ram and after sixteen days smear the brisket again using ocre of a different color.

With breeding operations over, the flock should be maintained on good pasture until brought in for the winter. Shelter should be provided on cold rainy days, but apart from this they are better outside. As the pasture becomes scarce additional feed should be provided.

Early winter feeding should be arranged so that the change has as small an effect as possible on the sheep. Good use can be made of succulent feeds at this time; for they aid considerably in keeping sheep thrifty. Such feeds as corn and grass silage or turnips are especially desirable; the latter can be used either whole or chopped. Pure-bred breeders, however, usually prefer to use chopped turnips. In addition, good hay in adequate amounts should be fed. If the hay is of poor quality the addition

of a mineral mixture such as that recommended by the Quebec Feed Board is desirable. Salt is always necessary and in certain areas iodine and cobalt should also be added.

When no succulent feed is available, sheep will do sufficiently well on good quality hay alone during the first half of the pregnancy period. Generally on most farms, however, the addition of some grain is helpful. Oats or mixed grain plus a little bran and linseed oil meal is a good combination. It may be fed at the rate of one-half pound per head per day. If the hay is of poor quality the above grain mixture plus ten per cent linseed oil meal should be used.

The average loss in weight of a breeding ewe at lambing time may be as high as fifteen per cent. Because of this, if a pregnant ewe is to be in equally good condition following lambing as she was when bred, she must make not less than this percentage gain during pregnancy. Sheep which are not in good condition at breeding time should, therefore, be fed sufficient feed so that the ewe will take on this additional weight which will result in a greater flow of milk. Milk is the cheapest and most efficient means of obtaining large and economical gains on nursing lambs. This increase in weight is best brought about during the latter half of the pregnancy period.

Good Sanitation Means Less Disease

Housing, while not a large item of expense, should be adequate for the purpose. The houses should be draught-free and clean, with sufficient window space to provide good light; this latter aids in maintaining cleanliness and makes the flock look more attractive. There should be sufficient floor space to provide a minimum of ten square feet per ewe for the smaller breeds, and one foot per ewe of rack space. The racks should be so constructed and located that the feed can be put in without getting it on the necks and backs of the feeding sheep. Wool which is filled with chaff is not only difficult to handle but has a lot less value.

There should be little trouble with disease during the first half of the pregnancy period. Care should be exercised, however, in the feeding of silage. At the start only a small amount of good quality silage should be fed, and this can be increased gradually.

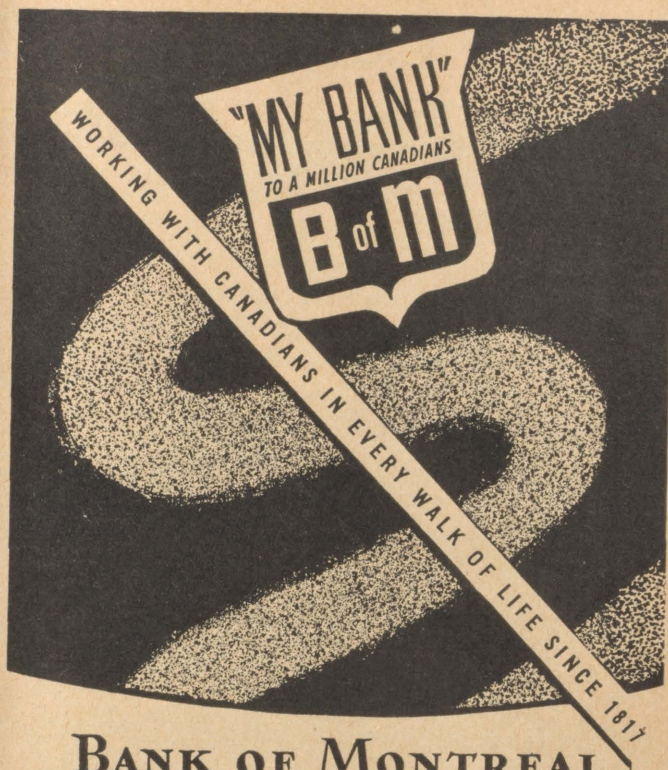
In a later article the question of preparation for lambing, and feeding management after lambing will be dealt with.

Growth of Credit Unions

Co-operative Credit Unions in Canada now total 2883 in number, with more than a million members and assets totalling \$311 millions, according to a report issued by the Federal Department of Agriculture.

More than 1000 of the credit unions are in Quebec province, Ontario being second with 941. Saskatchewan has 245, B.C. has 223, Nova Scotia 221, Alberta has 203, Manitoba 149, New Brunswick 163 and P.E.I. 55.

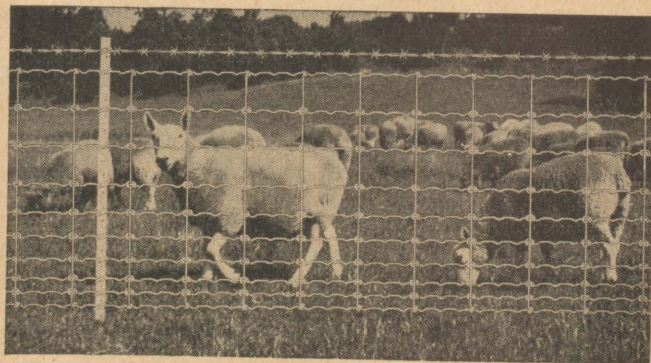
In 1920 there were only 113 of the co-operative banking units in Canada, with assets of about \$6.3 millions.



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What Caused the Drop in Hog Prices?

Dr. E. C. Hope, C.F.A. Economist, answered this question at a series of Farm Forum Rallies this fall. Here is his explanation.

WHAT goes wrong with our system when hog prices rise rapidly to \$41.00 a hundred for grade A carcasses then drop rapidly to \$29.70 which is below the \$33.00 to \$34.50 price range which had been maintained for a fairly long period? Farmers in Quebec have been perplexed by this and want the explanation. Dr. E. C. Hope of the Canadian Federation of Agriculture explains it this way.

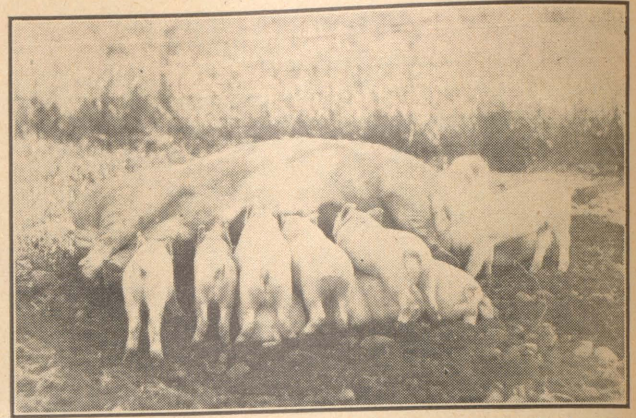
Law of Supply and Demand

The Law of supply and demand has not been repealed. Here is how Dr. Hope describes the law's operation in respect to hog prices:

- (1) Hog slaughterings were maintained fairly steadily at 80-85,000 per week.
- (2) Urban people consumed this pork production at prices that realized \$33.00—\$34.50 for the farmer.
- (3) During the summer hog slaughterings dropped steadily from 80-85,000 down to a low of 60,000 per week.
- (4) Canadian packers bidding for this smaller number of hogs pushed the price up to a high of \$41.00.
- (5) American packers seeing this high price in Canada started shipping hams and bacon into Canada.
- (6) At one time the net import of American pork products was running close to 700,000 lbs. a week.

Note: American live-weight prices at Chicago had been holding steady at \$22.00 live-weight. By the time the hog is slaughtered, processed, and exchange and tariff paid, prices in Canada have to be \$34.50 or higher before it pays them to ship to the Canadian market.

- (7) The net import of a substantial quantity of American pork products brought the price back down to \$34.50 again.
- (8) The Canadian hog-slaughterings were rising again to around the 80,000 mark and it no longer paid American packers to ship to the Canadian market.
- (9) Everyone in the packing business knew there was a large pig crop coming on the market soon and that by the time they processed the hogs, slaughterings would hit over 100,000 a week and Canada would have to export pork.
- (10) As it turned out the packers were correct in this assumption and they started bidding down on hogs. This explains the fact that hog prices dropped from \$34.50 to \$29.70 while hog slaughterings were still at 80,000 a week.
- (11) 10 days after this price drop, Canada was slaughter-



These healthy young fellows don't seem to be bothered about the fluctuating price of pork.

ing 100,000 hogs a week and exporting hogs to the U.S.

Note: When American live-weight prices for hogs is \$22.00 it pays Canadian packers to ship to the American market only if our price is \$29.70. So at the present time our price goes up and down with American prices because we are exporting to that market. You might also note that American hog slaughterings are also expected to increase in the near future and hog prices are apt to drop even lower. Our present floor price on hogs is \$27.50. There is a distinct possibility that it will hit this low:

Can Anything be Done to Stabilize Prices?

To answer this Dr. Hope points out that there are only two ways to stabilize prices.

- (1) Let the open market establish the price and we as farmers adjust our production accordingly.
- (2) Accept government planning and regulation of production.

Dr. Hope asked his audiences to bear in mind the consequences of regimentation inherent in the second method.

In the opinion of Dr. Hope, farmers should watch the market and plan production accordingly. He suggested that farmers can get information on what is likely to happen by contacting the Economics Division of the Department of Agriculture in Ottawa.

Dr. Hope scorned the practice of farmers to go in and out of hogs. He felt farmers should quit this ruinous practice and stay in hogs or chickens or whatever it might be (if they like it) and plan their production with the market information at hand.

Little Reggie answered the door when the teacher called. "Is your mother in?" she asked.

"No, she ain't."

"Well, how about your father?"

"He's went out too."

"She ain't! He's went!" the teacher exclaimed. "Where's your grammar?"

"Oh, she's upstairs a lay-down."

The Half-Turkey for Dinner

by W. A. Maw

Since half the turkeys reared are males weighing over seventeen pounds, and most families prefer a bird of from ten to fifteen pounds dressed weight, it is usually difficult to get enough small-weight turkeys to meet the consumer demand. The alternative where a large turkey is not desired, is to take half of a large carcass. The half-turkey from a male carcass weighing over twenty pounds is actually a more economical buy, pound for pound, than the small carcass, which is usually a young hen. There is more breast and leg meat per pound dressed weight in the larger male carcass.

A rule to remember when buying turkey is to figure on three-quarters of a pound dressed weight per person, this should provide ample meat for second servings when desired.

Because of its shape many people consider the half-turkey difficult to both cook and carve, but if a few simple suggestions are followed no trouble should result.

The half-carcass should be cooked by laying it cut side down on the rack in the roasting pan. Cook twenty minutes to the pound on the basis of the original half dressed weight of the whole carcass. For example, if the dressed weight of the whole carcass was twenty-four pounds, the half-carcass would be considered twelve pounds for cooking purposes. The necessary time for twelve pounds would be thirteen times twenty minutes or four hours and twenty minutes. If desired the cooking time may be thirty minutes to the pound eviscerated weight.

While the half-carcass is cooking, the dressing can be prepared and placed on a sheet of waxpaper. When the carcass has cooked half the time necessary for roasting, remove the pan from the oven and lift the carcass out of the pan, place the dressing on the paper, on the rack and the turkey cut side down over the dressing, then return the pan to the oven to finish the cooking.

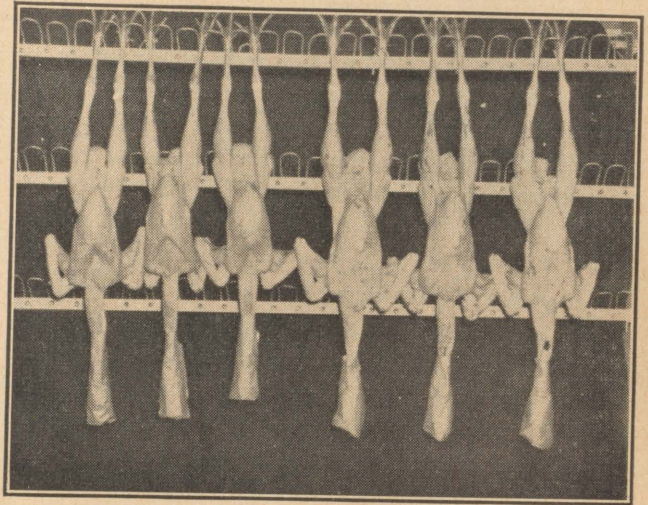
In order to avoid the necessity of periodic basting with fat while cooking, it is recommended that the abdominal fat be rendered before the carcass is placed in the oven. A double-thickness of cheesecloth to cover the carcass is dipped in the rendered fat and placed over the carcass, the remaining fat is poured over the cloth when it is in place. If a cloth is used as suggested, no cover is necessary for the pan while the cooking is being done.

The cooked carcass is placed on the platter for carving meat side up. The carving is done in the usual manner, removing the wing and leg first. Carve the leg meat before carving the white or breast meat. The dressing can be placed on a side platter or in a dish for serving.

The large carcasses carry a higher proportion of white

and dark meat than the smaller ones, and in addition the size of the breast area is much larger, thereby offering a distinct advantage when serving.

The cut carcasses such as the half or the quarter offer a variety of ways in which to use the meat, for example the turkey roll, the stuffed turkey leg and the sandwich roll of solid meat. Variety of use, as well as economy of purchase is possible with the half turkey.



Turkey broilers dressed at 14 weeks of age. Both males and females show a satisfactory body type and finish which will be popular with consumers.

Our Cover Picture

This church at La Guerre in Huntingdon County is said to be the oldest Protestant church in Canada. Although it is in a fair state of repair on the outside, the inside is a shambles of fallen plaster and decaying beams. Local residents feel strongly that something should be done about its restoration.

Fertilizer Spreader Should be Cleaned Now

It's easier to clean up those fertilizer spreaders now than it will be to loosen them up if they are left uncleaned this winter.

First, take a wire brush and give the spreader a good cleaning. Get all fertilizer completely out of the hopper, and then paint the inside with used motor oil or a rust preventive.

The axle shaft may rust and freeze the bearings unless these bearings are thoroughly cleaned and coated with oil. Some spreaders can be quickly disassembled for cleaning. Although this makes the job easier, spreaders should be put in condition for winter storage whether or not they are easy to take apart.

Winter Protection for Our Fruit Plants

by C. D. Taper

Can our orchards be protected from cold? During a period of expanding fruit production this question is heard with increasing frequency. Here are some of the answers.

WINTER hardiness of young apple trees in eastern Ontario and Quebec may be a matter of tree construction. A relatively tender variety, although exposed to severe and fluctuating temperatures, can survive and fruit for many years when it is built as a fruiting area upon a stem of hardy disease-resistant stock. The stem or intermediate piece must be grafted or budded upon a rootstock of a third variety, which is resistant to collar rot and root killing which results from winter injury. The process of building this kind of tree is known as double-working.

The variety Hibernial provides a stem piece which is resistant to cold and disease; it is a builder of mechanically strong frames; its compatibility with most commercial varieties has been proven. The variety Antonovka, also, will serve as a satisfactory intermediate structure, but it takes longer to work over than Hibernial.

The rootstock must be resistant to collar rot and root killing which occur when snow cover is deficient and frost penetrates deeply into the soil. Such hardiness is characteristic of seedling rootstocks of Russian parentage. A permanent solution to the problem of root injury may eventually be found in the selection of hardy clonal stock. One of these, *Malus Robusta* No. 5, selected at Ottawa from among seedling rootstocks of Russian origin, and propagated by vegetative means, is now being distributed to nurserymen for extended trials.

Trees Feel the Cold Too

The apple will thrive upon a variety of soils providing they are well drained. An ideal subsoil is a gravelly loam through which the roots can penetrate to a depth of eight feet. Some varieties will tolerate water retentive clays, but upon such soils the hardening off process in the autumn is delayed, and the resistance to winter injury decreased.

Plantations should be made upon a slope so that the cold air will drain away. The selection of the exposure is less well defined. Sunscald, for example, may be avoided by planting upon a southeasterly slope; this procedure is especially recommended if the orchard is in a region where the trouble is common. The benefits derived from planting upon a northerly slope, in order to delay the development of the buds so that injury from spring frosts may be avoided is, however, of more doubtful value. Damage caused by northerly winds may offset any advantages.



Coming events cast their shadows before. Here is a scene that should make all good orchard owners shiver. Pruning is cold-weather work, but it is most necessary to maintain good tree condition.

Another approach to the problem of hardiness in tree fruits is found in an examination of the cultural practices adopted.

In eastern Ontario and Quebec the sod mulch system aids considerably in offering protection to orchards from winter injury. The orchard may be seeded to a suitable grass which is mown once or twice during the active tree-growing period, and the cut material is then spread about the tree in a circle, starting a foot or two from the trunk as a measure in the control of rodents, and extending somewhat beyond the spread of the branches in order to cover the root system.

Under the sod mulch system a state of balance is reached with respect to the organic matter. The mulch increases the water level and conserves the moisture which is necessary for growth during the first part of the season. A reduction in the moisture level, and a resultant retardation of tree growth may be attained in the latter part of the season, by permitting the grass to grow.

Mulching encourages root formation near the surface of the soil. Nutrient levels under the mulch, with the exception of nitrogen, tend to increase. Under this system it is necessary to apply nitrogen in a ring under the outer spread of the branches, which is done in the early spring about the time the leaf tips appear. Approximately one fourth pound of sodium nitrate or ammonium sulphate yearly per year of tree age is a satisfactory application under most conditions. The required quantity may be estimated by studying the amount of annual growth.

Part of the nitrogen application is necessary for the decomposition of the mulch. The remainder is exhausted by the tree during the period of active growth. Comparative nitrogen starvation results in the latter part of the season. This, in combination with reduced water levels,

tends to induce the differentiation of new fruit buds, to retard growth, to prevent any delay in defoliation and to ripen the new wood before the arrival of the first heavy frost. A tree thus hardened-off is in good condition to resist winter injury. Should the snow cover be insufficient, the mulch will prevent a deep penetration of frost.

The time of pruning is a further factor in the protection of young apple trees against winter injury. Pruning tends to stimulate cambial activity, and to render the trees vulnerable to winter killing. It should not, therefore, be undertaken until late in the winter or early spring, after the coldest weather is past.

The sod mulch system is worthy of careful consideration as a cultural method. With respect to low temperatures it is a system which appears capable of providing a useful degree of control over tree performance.

Winter Protection of Raspberries and Strawberries

It has been found in Quebec, that raspberries may be afforded winter protection by bringing the canes together so that they may be tied in bundles of convenient size.

Wild strawberries are usually found where there is some shelter which traps a blanket of leaves and snow. When local wild plants benefit from shelter, it should be realized that commercial varieties require some protection from external cold and freezing. A mulch of clean wheat straw will provide the necessary protection. It should be applied after the first severe frost to a depth of approximately three inches when it has settled. In the spring it should be removed to the area between the rows when the new leaf growth appears. This may be during the first week of May. The mulch will delay the season of blossoming, and will decrease the danger of injury to the flowers from late winter frosts.

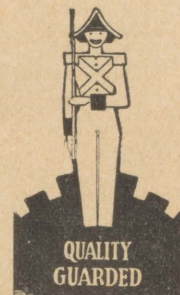
The Farm Forum rallies in Brome, Sherbrooke, Missisquoi and Chateauguay were organized to make more effective use of Dr. Hope's services as a speaker. The audiences were organized into groups of from seven to nine people. Each group was asked to decide upon a particular question which they would like Dr. Hope to answer. The questions were then summarized and presented to him.

Dr. Hope discussed with the groups such problems as grain, hog and butter prices, inflation, price stabilization, production planning, young people on the farm, farm labour, why farmers have to sell wholesale and many other problems which are discussed whenever a group of farmers get together.

The important thing, however, was the fact that everyone at these Rallies participated, and the speaker dealt only with those problems the people suggested.

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Finishing Turkeys for Market

by W. A. Maw



The first step in producing good turkey broilers is to have uniform, medium-sized birds.

THE aim of most poultry raisers is to ship birds of high market quality. The type of feed used for fattening or finishing purposes depends upon the type of bird. For example, chickens whether on range or in confinement are usually fed a wet feed; turkeys under the same conditions are generally finished by the use of heavy grain feeding during the last four to six weeks before the date of dressing for market.

While most turkeys are finished for dressing as mature-bodied birds from twenty-four to twenty-eight weeks of age, the females being dressed at the earlier age as they mature quicker than the males, the smaller types such as the Charlevoix, the Beltsville Small or the Jersey Buff, which are early maturing, can be profitably finished for market at twenty-two weeks of age. At this age these smaller types are more efficient in feed use for ultimate body weight attainment. Due consideration should be given to the finishing of all smaller types at this earlier age.

Trends in Finishing and Dressing

During the past few years there has been a trend towards the finishing and dressing of turkeys at the so-called broiler age, that is, from twelve to sixteen weeks. The fattening or finishing of such young stock is difficult, since they are growing at a fast rate and the skin of the body is very thin, in addition the turkeys are not eating much grain, since the requirement for fast growth is a high protein ration. It is, therefore, advisable to carry broiler stock on the starter ration up to the time of dressing for market.

Most turkeys are dressed for market during the late fall season after the cool weather has set in, and feeding for finish by the use of heavy grain feeding is easily

handled. The birds gradually consume more grain as age advances and the cool weather encourages the birds to eat more grain, which is high in carbohydrates and is fattening in effect. As body maturity approaches, the growth of muscle is being completed and the body puts on fat. Market finish is defined on the basis of the distribution of fat within and over the entire body. The plump-bodied bird carrying a good covering of fat is placed in the highest category of quality, providing, of course, that no blemishes or abnormalities in body exist.

The simple method of feeding grain, either as mixtures of corn, wheat, oats and barley or corn alone, freely in open hoppers, will give good results in fattening the mature bird. Many producers feed a regular fattening mash in pellet form or as a dry or moist mash feed for the last four to six weeks of growth. Such rations usually carry approximately sixteen per cent protein and carry a high percentage of cornmeal and barley meal. Additional protein in the form of skim-milk or buttermilk may be used to advantage for mixing a wet mash which can be fed twice daily. Grain is also fed freely when such mashes are used.

An additional feature worth noting is the use of such condiments as dried parsley or celery leaves in the finishing mashes, as they impart a characteristic flavour to the body fats very acceptable to most people who enjoy eating turkey meats.

Spectacles for Chickens

Take Louis J. Harwood's word for it, there's nothing that keeps a chicken healthier or more productive than a pair of prince nez spectacles. He says they are the biggest boon to the poultry business since creation of the egg.

He makes them himself—plastic gadgets called "spectroms." They come in a variety of shades, but the red, or rose-colored, are considered by some as the best.

Harwood, who owns a chicken ranch at Farmingdale, N.J., attended the 35th annual American poultry hatchery convention. On display he had two leghorn hens wearing his "eye glasses."

Harwood says the real purpose of the spectacles is to eliminate "cannibalism," one of poultry men's biggest headaches. When not laying eggs, chickens like to peck at each other.

When blood is drawn, the whole flock descends on the victim and pecks it to death. The plastic glasses clamp on the chicken's nose and once on, they are worn for life. They permit the bird to see sideways and downward but not straight ahead.

Is Soil Erosion Disastrous?

The statement often is made that it takes Nature 300 to 1,000 years to produce an inch of soil. A foremost soil worker of the United States recently pointed out, however, that this statement is true only when the soil is being formed from solid rock. He emphasized that, when the soil is shallow over rock, its loss by erosion well may be considered to be disastrous. On the other hand, he gave examples of relatively rapid restoration of eroded soils to productivity, especially where sheet erosion has removed the top soil without deep gullying.

An experiment at the Ohio Experiment Station was used to illustrate the point that some soils recover rapidly. In this experiment the top 6 inches of soil was removed artificially and the exposed subsoil cropped. After only 8 years of good soil management of this subsoil, the yields of corn, wheat and first-year alfalfa were 72, 96 and 94 per cent of those for a neighboring area from which the top soil had not been removed. In this case the soil itself was relatively deep and was underlain by a deep layer of soil-forming material. This experiment illustrates the best side of the picture.

The general conclusions reached by the speaker were that soil erosion is not always disastrous and, that the degree of erosion which has taken place, and the nature of the soil on which it has occurred, must be taken into consideration in assessment of the seriousness of the damage which has resulted.

"Joe Beaver"

by Ed Nofziger



"Sure it was just a ground fire—but these trees will suffer just the same."

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Hatcheries May Revolutionize the Pig Business

HENRY FORD put America on wheels by turning out a mass-produced car. Each man in the factory concentrated on one job, and he did that job so many times that he became an expert. We all benefited from this mass production for it meant more and cheaper goods, and this raised our standards of living. It was a pretty big idea but slow to catch on in agriculture generally. Here in the east we continued doing a lot of jobs on our farms all through the year.

The poultry people were among the first to make use of the idea of mass production in agriculture, and it revolutionized their industry, and now the hog industry is beginning to make use of this same idea, and the likelihood is that it will bring about a revolution in the breeding, raising and feeding of hogs.

Less Work and Better Hogs

The introduction of pig hatcheries is a further step in the revolution which has been taking place in agriculture during the last ten years. The idea underlying the scheme is to take the sow off the individual farm. It is recognized that keeping a sow or two is a costly and time consuming matter for the average farmer, also, in many cases he cannot afford to pay for the services of a high quality boar even if he wished, and the breeding stock warranted.

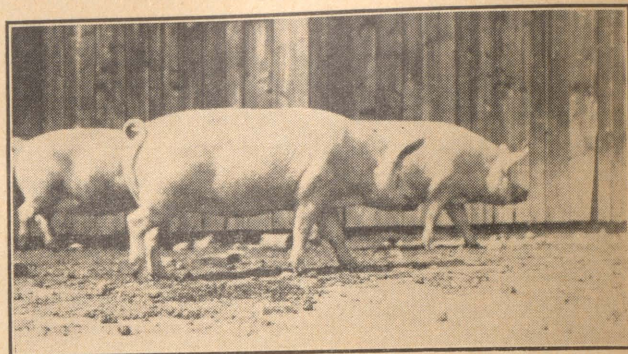
Through the use of this new method more efficient culling of the breeding stock, scientific feeding, and breeding only by high quality boars can be achieved. The rough stock will gradually be eliminated, and breeding can be carried on with an eye to improving the desirable traits in hogs. All this adds up to better brood sows and more uniform pigs at weaning time. The man in charge of the hatchery is an expert concentrating on one job, and that leaves the farmer free to concentrate on his end of the job, that of feeding the hogs for market. When he buys the young pigs from the hatchery they are off to a head start, and with good feeding on the farm this method should lead to a sharp increase in the marketing of quality hogs, and that means more grade A carcasses at the packers.

The average size of a hatchery, judging by those in operation in Canada at the present time, would seem to be approximately one hundred sows. This seems to be the maximum number that one man can handle efficiently. There is no reason why they should not be larger and employ more men if the business warranted.

Experimental Hatcheries

Some few months ago the first pig hatchery in Ontario was opened on the farm of Dr. Carl Martin of Milton Ontario. It is being operated as a private enterprise by

Less work and better pigs is the outlook for the farmer when pig hatcheries are in operation. Here's a discussion of what this idea means to the hog farmer.



If quality in pigs means anything at all, these young sows should produce plenty of uniform young.

Dr. Martin under agreement with the Ontario Department of Agriculture. His establishment was selected after surveying the field because it appeared to be in the best position to provide the necessary facilities. He has a basic herd of forty-five sows, and a farrowing pen with capacity for twenty sows. In addition there is sufficient barn space to house a large number of pigs.

Under the agreement Dr. Martin is to maintain a herd of approximately one hundred sows. His own herd was culled and the Department is prepared to loan any additional sows required to bring the herd up to that number. It is planned to use only pure-bred sows and boars tracing to Advanced registry. The herd will be subject to periodic inspection by staff members of the Ontario Veterinary College and Dr. Martin has the privilege of calling on these men at any time disease might be suspected.

Dr. Martin will have control of the sale of the pigs, except that he has agreed to offer for sale all little pigs produced, when they are between six and nine weeks of age. He is required to maintain records covering the cost of production and to make these available to the Department. From these records they expect to learn the practicability of such pig hatcheries.

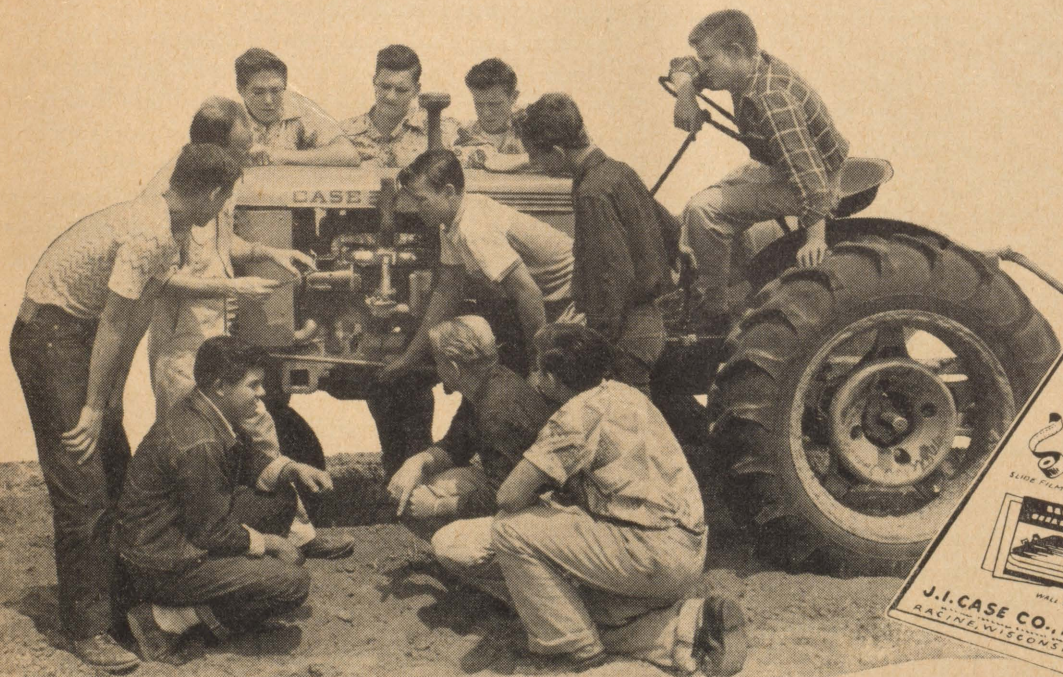
Out West too, pig hatcheries are off to a good start. Many of them are co-operatively owned as at Arborg, Manitoba, and Choiceland, Saskatchewan, with another in the planning stage at Tisdale, Saskatchewan. At Morris, Manitoba, there is another hatchery which is operated at present by the Manitoba Pool Elevators, but it is hoped that a local co-operative will be formed in the near future to take it over.

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Forget not your days on the tractor, the rainy afternoons in the shop, the dusty demonstrations in the field. Let these things go with you, through college and after—a foundation for your study of science, a resource for the routine of life. Whatever state or nation may be your mailing address, you may be sure that Case tractors and machinery are working to make farm life easier and more abundant. And whatever may be your part in the choosing of farm power machinery, look into the cost-saving, long-lasting character built into Case products.



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SINCE 1842





DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Co-operative Organization in Quebec

The Superior Council of Co-operation (Le Conseil Supérieur de la Coopération) has recently increased its membership by including representatives of local co-operatives; by this step the Council becomes more fully representative of all co-operative organizations in Quebec. It will be called in future the Quebec Co-operative Council.

The Council, which is a non-profit organization, was conceived as a sort of "brain trust" whose role would be to act as a source of information and propaganda about co-operation, to coordinate all co-operative activities in Quebec, and to advise and guide co-operators in their affairs.

It was originally set up in 1939, at the suggestion of the Faculty of Social Science of Laval University, whose director, Father George Henri Levesque, had realized the need for some co-ordination of the rapidly expanding co-operative movement in the province. Co-operation, at that time, was not new here, of course; but it was not consolidated into one, united force. Mutual aid societies had been functioning for some sixty years, but they hardly realized that they were really co-operatives. Agricultural co-operatives were just emerging from a crisis of growing pains which had almost wrecked them. Credit Unions were just beginning to expand; fishermen's co-operatives had just started forming, and for all practical purposes, there were no consumers' co-operatives at all.

With all this confusion, the task of bringing everything together under a common supervising or advisory body seemed an impossible one. Therefore, it was decided to organize from the top; to create a federation of federations, as it were. Through the untiring efforts of such men as Father Levesque, Henri Bois, Gerard Filion, Victor Barbeau, Alexandre Boudreau and Cyrille Vailancourt, agreement between the various broad sections of co-operation was achieved; and had it not been for their efforts, the co-operative movement in Quebec would be far from what it is today. Under the guidance of the Council, co-operatives amalgamated, federations were formed, and branches of co-operation came into being that otherwise might never have seen the light of day.

When first set up, the Council consisted of representatives of three groups: one delegate from each Federation of co-operatives (e.g. the Co-op. Federee, the United Fishermen, etc.); one from each institution or organization

engaged in teaching co-operations (universities, the U.C.C., etc.); and, finally, representatives from organizations which are actively interested in co-operation and in promoting the co-operative idea. Certain government departments and professional associations such as the Corporation des Agronomes would be included in this last group.

Under the new scheme, adopted at a general meeting of co-operators held at the University of Montreal on October 12 and 13, representatives of local co-operatives are now a part of the Council. There has been some criticism of the make-up of the Council; it has been said that this body, charged with the duty of safeguarding, among other things, the essentially democratic character of co-operatives, was not itself a democratic organization. And there was, probably, some justice in this comment although, as we tried to point out earlier, the very nature of the task made it necessary to organize from the top down rather than from the bottom up.

However, any local co-operative wishing to affiliate with the Council may now do so, and may send delegates to the Council meetings. Thus the representation on the Council has been broadened to include both the federations of sections, and the local basic co-operatives as well.

With the approval of the new set-up, the delegates at the general meeting also approved a six-point declaration of the aims and purposes of the Council, which may be expressed as follows. The Council will

1. Define and publicize the aims and purposes of co-operation.
2. Do everything possible to co-ordinate the operations of Quebec co-operatives and make their operations more efficient.
3. Encourage new groups to organize co-operatively.
4. Expose and denounce groups which operate in the guise of co-operatives, but which are not, in fact, co-operative.
5. Collaborate with public bodies and act as the spokesman of the co-operative movement.
6. Work for the development of the co-operative idea, and publicize the social and economic advantages of co-operation among co-operators and the general public.

Change in Law Proposed

Another task which has been engaging the attention of the Council for some time past is a study of the

present laws which govern co-operatives, with a view to recommending any changes which may seem advisable and necessary. For instance, there is nothing in the statutes which would provide for the organization of such a body as the Council; it had to be incorporated under the Companies' Act, and the survey of legislation will include a recommendation that a section dealing with the organization of the Council be included. The Provincial Government agreed some time ago to name a committee to investigate the advisability of changing the law, and the members of the committee were named by Premier Duplessis a few weeks ago. These are Messrs Theo Legault, a notary of Montreal, who is named chairman; Daniel J. Murphy, farmer and mayor of St. Ignace de Stanbridge, and Jean Mercier, lawyer, of Quebec.

The secretary of the committee is François Jobin, also of Quebec. A good part of the work of the Council during the past year has been preparing certain suggestions for this committee to study, and their reaction is awaited with interest.

Co-operatives Forging Ahead

In his remarks to the General Congress, Mr. Rene Pare, who is Chairman of the Superior Council of Co-operation, gave some interesting figures which show dramatically how the co-operative movement is thriving in Quebec. He pointed out that groups of co-operatives, all engaged in the same type of business in different parts of the province, have their own central organization.

For example, the Co-operative Federee is the federation of the agricultural co-operative group or section. Similar federations exist in other branches. Taking the sections one by one, he explained that, at the present time, there are 609 individual co-operatives affiliated with the central organization, with a total membership of 69,382. Individual membership has increased during the year, but the total number of co-operatives has decreased, due to the fact that a number of co-ops have merged for more efficient operation. Assets of these agricultural co-operatives amount to \$39,511,222, which is an increase of over \$2,000,000 in the year. Total business transacted during the past year amounted to \$111,901,042, which is a good indication of the economic importance of this section of the population of Quebec.

Another section is that of the Credit Unions. These, however, are not yet affiliated with the Council. Here, too, progress is being maintained.

There are eight Mutual Insurance Co-operatives operating in the province, federated under the name of l'Union des Mutuelles-Vie Francaises d'Amerique, and all are growing. At the end of 1950 they had \$262,659,548 worth of insurance in force, and their federation offices have been particularly active. A correspondence course on mutual insurance has been prepared, which will be given by the University of Laval, and a report

on the activities of this type of insurance association has been drawn up for presentation to a committee which is studying possible revisions in the insurance laws of Quebec.

Consumer co-operatives have been active, and most of them have enlarged their membership and their business. Their federation is known as l'Alliance, and individual co-operatives number 145, some of which are part consumer and part agricultural co-operatives.

Fishermen's co-operatives are organized under the name The United Fishermen of Quebec. Their chief occupation during the year, apart from the routine, was to develop local markets for their catch. They report 36 individual syndicates with a total membership of 3,237.

Electricity co-operatives installed 1,117 miles of new lines during the year and added 4,559 members. There are 37 of these co-ops in active business, an increase of 7 in the year. Since 1946 they have installed 4,558 miles of line, and by the end of this year they hope to put in another 700.

Building co-operatives had a hard time in 1951. They built 1000 houses in 1950, and expected to build 1500 in 1951. But high prices and scarcity of materials forced them to reduce their operations to a minimum, and only about 10 co-operatives actually put up any houses.

Lumbermen's co-operatives form the eighth section, but the past year has been one of stabilization rather than expansion in this line of activity.

Such is the position of co-operation in Quebec today. It should never be forgotten that co-operation is the bulwark of the little man, of the working man; this is the way the founders of the movement planned it. But as co-operatives grow larger and larger, there comes a tendency to forget this point. It is one, however, that must never be lost sight of, and the way to preserve this essential attribute of co-operation is by remaining true to the basic principles: all for one, one for all; one man, one vote; patronage dividends and limited interest on capital invested.

Grass-Fed Steers

The Lennoxville experimenters had a couple of nice little beef animals at Sherbrooke when the Winter Fair was on to demonstrate what can be done with grass as the main feed for fattening steers. The two Shorthorns 29 months of age, weighed 1,153 pounds. During their 903 days of life on the farm, they consumed

1,987 pounds of hay

13,856 pounds of silage

430 pounds of meal

and were on pasture for 456 days.

The lesson they point is simply this; that the cost of beef production can be lowered by feeding more grass and silage and less meal.

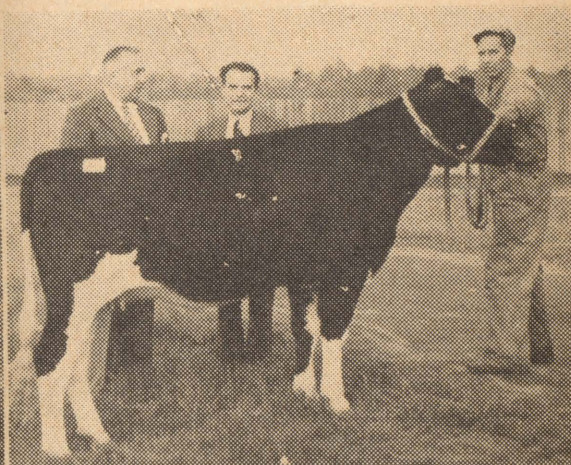
The first annual meeting of the Quebec Turkey Raisers' Association was held at Quebec last month, with some forty breeders present. In addition, the meeting was attended by the Hon. Patrice Tardif, minister without port-folio at Quebec, Ubald Pilon, provincial poultryman, Noe Henault, federal inspector of poultry products, and a number of other technicians and government men.

Good news for the members was contained in the report, which indicated a growing demand from Western Canada for turkey eggs and turkey chicks from this part of the country. In the past, their supplies have come from the United States. It was explained that the hardiness of Quebec stock and their high quality, a better hatching rate and our freedom from Newcastle Disease are all factors in this increasing interest in our products.

During the past season, Quebec sent 65,000 eggs and 110,000 chicks west, which represented a cash value of around \$90,000. To this date, orders for the present season are double those, which promises well for 1952.

The Association realizes that this turkey business is worth keeping going, inasmuch as it represents a potential cash income of \$150,000 or \$200,000. The executive proposed several lines of action. They urged turkey men to concentrate on the Broadbreasted Bronze variety, as the one which gives carcasses in demand on the market; to put their flocks on R.O.P. (17 poultrymen are already doing this), to keep their production costs as low as possible and to publicize their offerings. It is proposed to run a series of short courses and conferences on turkey raising during the year, and to affiliate with the Canadian Turkey Federation.

Top Holsteins at First Quebec Consignment Sale



The first consignment sale of Purebred Holsteins held in Quebec took place at St. Hyacinthe, with 67 head of high quality stock bringing the excellent average of \$653.36. This sale, first of its kind in Quebec, marked a milestone in the progress of the Holstein breed in the province.

Browns Mistress Bonheur, (left) three-year-old daughter of the noted XXX sire Montvic Rag Apple Master, brought the top price of \$1550. She was sold by Brown Corporation, La Tuque and bought by Lionel Baril, Princeville. With her (l. to r.) are: W. S. Hall, Oakville, Ont., runner-up in the bidding; Tom Cleland, Manager of the Brown herd; Gerard Labissonniere, Agronome at Princeville; Lionel Baril; and Roland Rondeau of Brown Corp.

Princeville; Lionel Baril; and Roland Rondeau of Brown Corp.

Lady Marksman of Lake Aylmer, (right) was the highest priced bred heifer at \$1,000. She was purchased by Brother Joyal (centre) for the Orphellnat St. Joseph, Waterville. Named Lady Marksman of Lake Aylmer, she is a daughter of the seven times All-Canadian, Montvic Rag Apple Marksman and was sold by W. K. MacLeod, Thetford Mines. (L. to R.) W. K. MacLeod, Brother Joyal, and Wm. McKie, herdsman for Mr. MacLeod. Brother Joyal also bought a bred heifer from Amedee Trepanier, Princeville at \$710, the two to form the nucleus of a Holstein herd that is being established at Orphelinat St. Joseph.

Junior Clubs are Active

The members of junior farmers' clubs today are the men and women who will be running the farms in just a few years, and too much cannot be said about the importance of this work. It is encouraging to note in the report of the Canadian Council on Boys' and Girls' Club Work that the enrollment in clubs across Canada has reached an all-time high in 1951, with no less than 57,816 rural boys and girls enrolled in 4,333 separate clubs.

Club work is carried on under three general headings: Home Economics, Live Stock, and Field Crops. In addition, there are clubs in tractor maintenance; farm forestry, and several others of one type or another. In point of view of numbers enrolled in each, Clothing Clubs for the girls lead all the rest with an enrollment of 11,638; next come the dairy calf clubs with a membership of 10,621. The average age of the club members is 14.3 years, and the average number of member per club is 13.3. There is an almost exactly even division between boys and girls enrolled — 28,853 girls and 28,963 boys.

By provinces in Canada, clubs and enrollment are as follows:

	<i>Clubs</i>	<i>Members</i>
Prince Edward Island	120	1,595
Nova Scotia	604	7,724
New Brunswick	170	3,117
Quebec	355	7,569
Ontario	1,481	15,389
Manitoba	627	8,358
Saskatchewan	393	5,941
Alberta	426	6,575
British Columbia	157	1,548

The report goes on to say: "There is a big job to do in the junior field on publicity. If there is a young farmer in your community who does not belong to your club, some one has fallen down on the public relations job. Too many people think of publicity as a full page ad in the paper, or a blurb on the radio. But fundamentally, publicity is making facts known to the public, and a lot of this can be done by junior farmers in their daily contacts with others. Time and a little effort are all that are needed to give good publicity to most junior work. Newspapers and radio stations are only too glad to print and broadcast happenings in the community; but they have to be told of events before they can describe them. Too often meetings and decisions of farm groups are treated as top military secrets."

Banquets Honour Farm Leaders

The Minister of Agriculture has been guest of honour at two banquets recently, given as a mark of their neighbours' esteem for the winners of the regular and of the junior Merit Agricole competitions. On October 21 he was at St. Ours sur Richelieu to take part in the proceedings organized for the Gold Medallist, Ernest Bourgeois, who is the first man from Richelieu County to win the award. Of particular interest is the fact that the High Mass

which opened the day's celebrations was sung by Mr. Bourgeois' son, Rev. Father Bourgeois, O.M.I., who also preached a special sermon.

Later in the same week, another celebration was organized in honour of Germain Beauregard, winner of the Junior Merit Agricole award, and Leon McDuff, the Silver Medal winner, at St. Damase. This one was organized by the Agricultural Education Service of the Department of agriculture and the local agronomes.

Agronomes and New Canadians

The task of the agronome is to help the farmers in his district. But for some, this is a little more demanding task than it is for others. We refer to those agronomes in whose districts new Canadians have settled, and who are trying to get accustomed to Canadian ways of doing things.

The other day, at the invitation of Mr. April of Ste. Martine and Stephan Boily, who has charge of establishing newcomers on farms, some 150 recent arrivals — French, Belgian, Dutch, Swiss, Italian and German — came to a meeting at the Agricultural School, with their agronomes, for a day of conferences, when they were told about the different ways in which the government stands ready to help farmers in Quebec. They heard about our Farm Loan Bureau, the experimental farms service, what the agronome can do for them, where they can go for help and advice, and many other things.

A day like this must have been most encouraging for these relatively new arrivals. Everyone who spoke had a word of welcome on behalf of Canada and the Province of Quebec. Everyone extended the band of friendship and the offer of help if help were needed. It must have made them feel that they really had arrived in the land of promise.

More Livestock on Farms

The census of livestock on farms taken during the past summer reveals an increase in our animal population in Quebec. The figures as supplied by the statistical division are as follows:

	1950	1951
Horses	270,800	288,200
Dairy cows	1,129,900	1,124,000
All cattle	2,038,000	1,985,500
Hogs	1,439,000	1,249,900
Sheep	377,800	397,600
Hens, pullets, cockerels	11,592,000	11,551,000
Turkeys	563,000	529,000
Geese	13,000	13,000
Ducks	48,000	88,000

Strippings

by Gordon W. Geddes

After reading the bulletins on trace mineral elements and their possible effect on Bang's disease, mastitis, etc., we did considerable writing to try to find out more on the subject. As might be expected we got quite a number of opinions that it was no good but also found out that Louis Bromfield accepts it as a definite fact that manganese has a strong influence on the presence or absence of such diseases. Since the bulletins themselves offered such strong evidence to support their claims and since the mere possibility of being able to keep these wolves from your door would justify considerable trouble and expense, we tried to locate either the necessary ingredients or a ready-mixed formula of them. At last we found a company that made it in the States but we must pay shipping charges for a long way, 20% duty plus 10% sales tax on combined value and duty and exchange on the money.

However we did finally discover that we could get the two main ingredients, manganese sulphate and copper sulphate, from the CIL at a very reasonable price. We are not too sure that the manganese is suitable for feeding but we are sure that the cattle do not like to eat it so it is one case where we cannot depend on animal instinct to recognize the need for it if it does exist. By putting it in the midst of a feed of sliced turnips and 'sugar-coating' it with molasses. Before I finished the previous sentence I got into conversation with a veterinarian who thought it might be a bit risky to use the manganese from such a source for stock-feeding as it might be suitable for the purpose for which it was intended but contain ingredients unfit for feeding. He had obtained a little from a reliable source as far as quality was concerned but at a prohibitive price unless it was accompanied by a double-your-money-back guarantee if you ever had a case of mastitis or Bang's while

feeding it. So unless we find a safer and a cheaper source of supply that experiment will probably fall by the wayside.

The planting of fall rye almost fell by the wayside this year but eventually it fell on the old hillside behind the barn. At first we thought there was no time for it and then couldn't resist the temptation to try some. It was the nearest piece of old pasture to the stable that we have, but it had never had anything done to it since I can remember. It must have been plowed at some time as there were stones in the small piles that people used to have the bad habit of dumping them in. Some of it was rather steep and it was deeply cut up with the old cow paths as the cattle cross it to the pasture. However, once we began on it, it was not as bad as some other pieces farther from the stable. At least there was soil to work with after it was plowed instead of a tough mess that the harrow would hardly mark. It was too late to furnish any pasture this fall but we hope it will prevent erosion and furnish some feed in the spring. We also intend to try to have it serve as a nurse crop for seeding down to pasture. We have heard that some have been able to run the seeder over their rye in early spring and put on the small seeds and an extra touch of fertilizer.

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They come on when the rye is eaten off and make an easy job of the improving. Anyway it is worth trying.

When we began to feel the lack of the rye, we turned the cattle onto some oat stubble which hadn't been plowed up. For some reason the combine seemed to have left quite a few oats there or else it was damp enough so every oat that was left sprouted. Be that as it may, there was quite a growth there. When we first put them in they got enough to eat so that they would not quite clean up the turnips which had been vanishing so quickly before. So part of the fall rye will be replaced there if it doesn't get so cold or so wet that we do not get it plowed this fall as the price of our extra feed.

We could well stand some moisture even before the plowing is finished as there is not too much water around in spite of the apparent rainy season. The October summer was better than the July one though it didn't help to harvest so much hay. Still it did give us a chance to get some wood inside in better shape than we had been anticipating. That is quite a chore here as we have three houses to supply besides the sugar camp.

We haven't been too displeased about the ban on margarine in Quebec but we wonder if the decision to stop the federal government undertaking a calfhood vaccination scheme in our section for Bang's is so good as it might be. Personally we would rather welcome such a programme. While the vaccine is not as good as we could all wish, still it is some protection when trouble strikes. It seems to strike more and more and we have felt for some time as if it should be accepted as inevitable and vaccination begun. To date we have allowed our opinion to be over-ruled but still are not too happy with the decision. We wish it was practical to vaccinate the whole herd in one year but it must be done with the calves and it must be when the calves are heifers if they grow into vaccinated cows. This year they are not so we need some manganese to hold off trouble until we get some.



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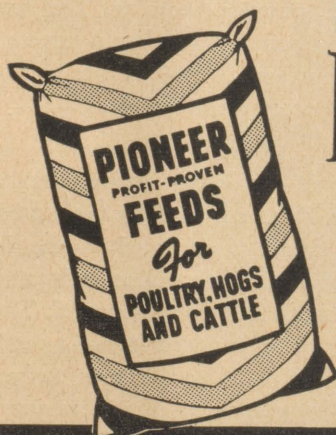
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What's New in Veterinary Science?

Cattle

As our livestock is now settled in the barns until next spring we have more time and opportunity to look into the minor troubles that may affect them. Typical winter problems include ring-worm, lice and other forms of "barn itch" that are of importance, and at this time of the year we can sometimes prevent herd outbreaks by taking a little extra care. Ringworm sometimes takes the form of the odd patch on the faces of young cattle, which does not seem to spread to any great extent. At other times it will flare up during the winter, and will affect all the young cattle on a farm, causing severe skin disease on any or all parts of the body. If a lesion is seen on any animal it is well not to take a chance; isolate the affected one and apply tincture of iodine, or a mixture of tincture of iodine and glycerine, to the affected place once a day. If a real outbreak starts it is wise to get professional assistance. When this fungus infection goes on the rampage it can infect the human skin to such an extent that hospitalization is necessary. Thorough washing of the hands in a 0.1% solution of one of the new quaternary disinfectants after handling infected cattle is a good protective measure.

Lice on cattle can be killed with a derris wash now before they become sufficiently numerous to cause trouble.

Hogs

We are seeing more cases of erysipelas in young pigs nowadays. The acute form of this, known as "Diamond Skin Disease", can be confused with acute forms of pasteurellosis, and as treatments differ (one responds to antibiotics, the other to sulfonamides and serum), a correct diagnosis is important in the early stages. If any farmer could work in a veterinary laboratory for any length of time, it is certain that he would never thereafter buy piglets that had been

weaned at 4 or 5 weeks (instead of 8), nor would he buy pigs that had not been given preventive inoculations against pasteurellosis.

Dogs

Dog owners are interested in the new "one injection" method of immunizing puppies against distemper. Reports are promising, but some veterinarians feel that we should reserve judgement for a time. An older problem concerns the too frequent use of worm remedies for sick puppies and dogs. If a potent worm medicine is used when an animal is coming down with distemper, or one of the related diseases, its chances of recovery are very much lessened. Worm remedies, improperly used, kill more puppies than do the worms themselves; they should never be used when an animal has a higher than normal temperature.

Intestinal Diseases

It is a peculiar circumstance that new diseases caused by toxic substances, sometimes formed in the intestines of the affected animals, are being more frequently reported. The X-disease, or hyperkeratosis in cattle in the U.S.A. is now known to be due to "harmful substances", as yet unidentified, that get into the feeds. Gut

oedema in growing pigs, reported from Great Britain, Norway, Denmark, Holland, Canada and the U.S. is now known to be due to a toxin formed in the intestines, and is similar in some ways to the enterotoxaemia of lambs that occurred on pasture in eastern Canada this year. Insofar as this latter disease is concerned, it appears that Canadian sheepmen should have their ewes vaccinated against that disease next spring, although if we have a dry period in June and July, the disease may not appear. However, dare we take a chance?

Horses

Owners of horses (there still are a few!), usually have their animals treated to remove bots in December. This treatment is not as popular as it once was, perhaps because a few accidents occurred from improper use of the only effective drug then known, carbon disulphide. Recent work in Texas has shown that there is another drug, toluene, which is as effective, and is less injurious. If it becomes more generally used perhaps the campaign against bots, and consequent reduction or eradication of that pest, the bot fly, will be accelerated.

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Everyone's Business

by Constance R. Dufresne

Farming is everyone's business, not only because it furnishes our daily bread, but because it is the basis of so many industries and so much of Canada's trade and commerce. Agriculture is also our most important single industry. It employs a quarter of our gainfully occupied population. The economic welfare of the whole nation is affected by changes in farm income and purchasing power.

Operating a farm is a complex business today. The changes that have occurred in farming during even one lifetime are astounding. Today's farmer must be able to use and maintain the most advanced types of modern power machinery, hire and supervise labour, obtain and manage large amounts of capital, control expenses, attain a balance between all phases of his farming operations and apply his physical energy as his father did.

The farmer's business has to do with the manipulation of nature, and nature brooks no radical departure from its accustomed ways; it cannot be tricked or deluded. In the olden days farmers were guided largely by superstition; today the questions in farming are answered by men who have wrought out the problems by research and by the agricultural colleges and experimental stations.

Many people have a very distorted impression of what is involved in soil conservation — something super-colossal, and completely beyond the ordinary farmer. Basically, soil conservation means good farm management, to get the greatest possible returns from the land, while building it up for continued productivity. It means putting each field to the use for which it is best suited, in relation to soil, drainage, the needs of the family and market demands. In other words, it is just a common sense approach to farming. A well-balanced farm business is one in which land, labour and capital are used to best advantage; by-products are used, risks are held down; and soil fertility is maintained. Such a balance in farming is necessary for high farm profits.

There are many things any farmer can do to improve his returns. For one — he can have his soil tested, and get an idea of what it needs for greater productivity. The soil may be run down; it may be low in humus or in minerals, or it may be acid. Why not call in the agronomist and talk it over with him. He can tell us how to go about this testing business, and can help us to apply the results to our farms.

If most farmers used all their knowledge we would be a lot further ahead. But few do. The trouble is that, while we have a lot of information, most of us can't see how we can put it to work on our farms; and that is the big reason for agronomists. Their job isn't so much to introduce new ideas as to help us apply what we already know.

The gap between our information and application is very wide. Part of it is, no doubt, due to habit; it is much easier to keep on doing what we are doing than to change to anything else. Part is due to expenses entailed in changing practices, expenses which farmers either cannot meet or aren't convinced would be justified by the returns. And part is due to the haziness of our information — we are not exactly sure how it would apply to us, or how to go about using it.

The longer we put off starting to improve our crops and our land, the bigger the job we'll have to do. To get advice from an agronomist costs nothing above what we are already paying through taxation; and we do not have to follow it. But if it sounds sensible — as it usually does, when we finally go after it — and we put it into practice, it may set us on the road to better farming.

One of the most important aspects of farm living, the farm home, is often overlooked when we discuss agricultural problems. With so much being written and said about such subjects as soil conservation, crop rotation, and bigger yields, we are apt to overlook the contribution



Miss Sylvia Burt leaves for the Weston Tour of Great Britain. Recently she was present at a meeting of the Ascot W.I. where she gave a vivid word picture of her experiences.

of the home to our rural communities. But soil conservation, crop rotations, and bigger yields are not ends in themselves; they are a means to an improved standard of living, an end in which our farm homes play a very important role. For the home is where the family is born, grows, and matures. Here the character, the ideals, the attitudes toward our fellowmen are moulded as surely as at the school which the head of the home helps to support.

Most of us are accustomed to associate conservation with the use of our natural resources so that the greatest good may accrue to the greatest number. This is a fair generalization. However, I think it will be agreed that any understanding that serves to increase the happiness and contentment of a large and important section of the population of this country is true conservation.

Countless worn-out fields remind us
We should build our fields to stay
And, departing, leave behind us,
Fields that are not mined away.
When our boys assume the mortgage
On the land that's had our toil,
They'll not have to ask the question
"Here's the farm, but where's the soil?"

The Month With The W.I.

Last month's reports told of plans being made for many school fairs — this month tells of their successful fruition. Count the number and you will find 23 branches mention the part played in supporting this project for training our future citizens. Here's the list:

Argenteuil — Arundel, Frontier, Lakefield, Pioneer.
Bonaventure — Port Daniel, Marcil, Shigawake
Brome — Knowlton's Landing
Chat. Huntingdon — Aubrey-Riverfield, Hemmingford.
Compton — Brookbury, Bury, Canterbury.
Gatineau — Breckenridge, Kazabazua.
Gaspé — The W.I. fair with its children's section, all branches taking part.
Missisquoi — Stanbridge East
Pontiac — Bristol, Quyon
Richmond — Melbourne Ridge, Shipton.
Sherbrooke — a county project, six branches assisted.
Stanstead — all branches donate towards prize list (Where are our pictures?)

Argenteuil: Arundel saw films on Nylons. Brownsburg heard a talk on "Cancer." Parcels were sent to local boys now in Korea and cards and fruit to the sick and shut-in. Frontier heard papers on "Soup for Small Means", "Etiquette" and "Washing Blankets". Jerusalem-Bethany discussed a paper on "Education" and voted \$5 for prizes in the junior grades. Lakefield realized \$15.61 from two travelling aprons. Lachute held a reception for the teaching staff of the High School. Bandages



Winners in the sports gather round for the prizes. A scene at the picnic of the Upper Lachute and East End W.I.

were sent to the Cancer Society. At Pioneer a letter from the provincial president, Mrs. LeBaron, was read. Upper Lachute and East End attended a demonstration party.

Bonaventure: Black Cape discussed the presentation of school prizes. A Garden Party, held at the home of the president, Mrs. Ralph Willet was a great success. Grand Cascapedia had a programme on Education with the convenor in charge. The following films were shown by Mr. J. Campbell: Peoples of Canada, Farm Homes Beautiful, and Film and You. Marcil had a sale of home cooking on the grounds at the Agricultural Fair which netted \$28. This branch joined with Port Daniel W.I. for a sewing course given by Miss Campbell. The past secretary of this latter branch Mrs. O'Flaherty, was presented with a gift in appreciation of her faithful service. Restigouche held a dance to assist the treasury. A lovely woollen sweater, which was displayed at the Handicraft Exhibit at the June Convention, was donated to the branch by Miss Louise Ryan for a special sale. Shigawake organized a Farm Forum in their district.

Brome: Abercorn entertained the Brome County Annual Convention, serving lunch to a large attendance. A Handkerchief display and auction was held, also a White Elephant Sale. At their meeting an apron parade was featured and \$5 voted Save the Children. Austin held its annual Garden Party jointly with the local W.A. This netted approximately \$700. A life membership was presented to Miss Jennie Channell in recognition of her splendid work in the W.I. and \$5 voted Save the Children. Knowlton's Landing had a demonstration of smocking and made preparations for the semi-annual county meeting to be held at "Glenbrook" the home of the president, Mrs. Westover. South Bolton is compiling a history of its branch. Linen was collected for the Cancer Society and old wool is also being collected for blankets. The meeting was held in the new club room, formerly a school house. Three new members were welcomed and a plant sale was held. Sutton held a quiz on flowers and discussed the sale of margarine. New comers

from Poland were welcomed and a member, who is leaving for England, was bidden bon voyage.

Chat-Huntingdon: Aubrey-Riverfield held a food sale at the Howick Calf Club Show. Miss Lillian Rankin, guest speaker, at the meeting, told of her duties as teacher and nurse when overseas during the war and later with UNRRA. \$10 was donated to the Cancer Society. Dundee discussed the perennial question, "Should Women be on the School Board?" Mrs. J. Platt, convenor of Agriculture, showed a collection of 20 different cacti and told of their culture. Franklin Centre heard a paper, "Music in the Home", read by Mrs. P. Sherrington. A spelling match, led by Mrs. William Hope, was enjoyed by all, Mrs. James Bruce being the prize winner. Hemmingford members held a jelly shower for the Barrie Memorial Hospital. Howick had as guest speaker, Mrs. Davidson of Ormstown, who told of her experiences while living on the Island of Malta during World War II. Mrs. Roy Younie read a radio broadcast by John Fisher, "Forgetfulness". Huntingdon voted \$25 to the Q.W.I. Service Fund and agreed to help with the Q.W.I. Bursary in Agriculture. This branch realized a satisfactory sum serving dinners at the Huntingdon Fair. Ormstown members have canned about 200 cans of fruit and vegetables for the High School. Dr. Murphy gave an address on "Prenatal Care". Nursing classes are being held in the Barrie Memorial Hospital for W.I. members.

Compton: This county received \$100 from the Hon. C. D. French, M.L.A., to be used as a scholarship. The committee appointed to administer the fund has given the award to Mr. Hall of East Angus to assist him with advanced studies. Brookbury donated \$100 towards the fund for the Union Cemetery, \$10 to the Cancer Society, \$2 to the Bible Society, \$2 to Save the Children and \$10 to a member for needed drugs. A plant was sent to a member who was ill and showers were held for three local brides. Canterbury gave clothing, quilts and held a kitchen shower for a family who lost their home by fire. Cotton was also sent the Cancer Society. "Ancient History up to the Present Time" was the subject of a paper by Mrs. Mayhew. Cookshire gave a \$50 bursary to a girl going on with her education. A reception was held for the teachers and a paper on "Old and New Methods of Education" was given by Miss Robb. Scotstown realized \$160.70 from a tombola. The teachers were entertained and a talk, "Little Albert" given by Mrs. Baumont.

Gaspe: L'Anse Aux Cousins heard a paper, "I Like Red School Houses". A parcel post sale brought in \$17.80. At York another parcel post sale brought \$25. A talk on "Education" was given by the convenor and a contest on geography. The president's birthday was remembered with a cake and card.

Gatineau: Breckenridge held a dance in aid of general funds. Wakefield heard a travelogue given by Bill Armstrong, son of the president, telling of his 10 months

visit in the British Isles, and other countries of Europe, illustrating his talk with pictures taken by the speaker. Old linen was donated to the Cancer Society and each member is taking out a membership in this Society. \$10 was donated the Can. Institute for the Blind and a contribution of \$100 to the Gatineau Memorial Hospital was acknowledged. Wright is holding an eight weeks St. John Ambulance Course. This branch reports \$317 collected to date for the Memorial Hospital by Mrs. Ellard and Mrs. D. Derby. Linen is being sent the Cancer Society. The president attended a tea for W.I. officers of Ontario and Quebec held at Ottawa Exhibition when Dr. Charlotte Whitton was guest speaker.

Jacques Cartier: Ste. Annes has profited by a rug making class conducted by Miss Bruneau. A flower and vegetable show was featured with Mr. Zandbergen acting as judge. The produce was later auctioned netting \$6.25. Mr. Zandbergen also gave a talk on the care of bulbs. \$10 was given to a family who lost their home by fire.

Megantic: Inverness catered to a supper for the Odd Fellows. Paint for the kitchen in the I.O.O.F. Hall has been donated and the room made ready for painting by the members. Scrap books are being made for the hospitals, old cotton collected for the Cancer Society and the monthly parcel sent overseas.

Missisquoi: Dunham sent a donation of canned goods to the local hospital. The county semi-annual was entertained here. Fordyce catered to the local Calf Club at a dinner with a profit of \$22.50. Stanbridge East heard a talk from the county president, Mrs. G. Brown, at the time of their fair, who gave a talk on different sections of the exhibit.

Pontiac: Bristol members each gave \$1 to the Cancer Society. A paper, "Leaflets Three, Let it Be", was given by Mrs. James MacMillan. Fort Coulonge had the grandmothers as special guests when a hat trimming contest and sale by auction was featured. A paper on the Canadian Cancer Society was read. Quyon donated \$50 to Quyon Beach and Playground Project. Plans were made for an open meeting in the High School auditorium with Dr. Carmichael of Ottawa as guest speaker. A silver tray was presented a departing member. Shawville held a flower show with a splendid display and prizes. Films, "Tulip Time in Holland" and "Songs by



Shefford County W.I. delegates attending Convention 1951. Mrs. Sicard, county president at left, Miss Alice Ashton, county convenor of Publicity, in centre.



The Huntingville-Milby Brownie Pack. Mrs. R. M. Boright, Lennoxville, divisional commissioner, and Brown Owl, Mrs. F. H. Allcorn, Milby. The Milby W.I. Club House, where the meetings are held, is in the background. Mrs. Allcorn will be remembered by those who attended the short course as the very able song leader.

Stephen Foster", were shown by Mrs. M. Hodgins, and Edgar Hodgins gave an organ recital.

Richmond: Dennison's Mills tacked two quilts for the members. At Melbourne Ridge Mrs. A. Wilfong gave an address on "Educational Subjects". \$10 is to be given to aid girls leaving the community to go into training for the nursing profession. A card party is being planned. Richmond Hill held a candy contest and sale, fines being paid by members who did not take part in contest. A farewell party was held for neighbours who are leaving the community, and a quilting bee was held. Richmond Young Women's made plans to hold a dance. A quilt was made and blankets given to a family who was burned out. Shipton held a dance and cleared \$36. A tour of the Johns-Manville plant at Asbestos was planned. Windsor sent the usual food parcel to England and a sunshine basket was sent to a shut-in.

Rouville: Abbotsford heard a talk, illustrated by a film, by Miss M. S. Taylor of the Canadian Cancer Society, Montreal.

Shefford: Granby Hill held a "Bring and Buy" sale, which netted \$4. Three quilts were tied and plans made for the county semi-annual. Warden discussed subjects taught at school and a contest was arranged by the convenor of Education. 50 cents per member is to be given to the Agricultural Bursary.

Sherbrooke: Ascot held an auction of miscellaneous articles. Miss Sylvia Burt, Lennoxville, who was one of the 50 chosen girls to tour Britain through the generosity of Mr. G. Weston, was guest speaker, giving a vivid description of her trip. Belvidere held their annual vegetable and flower show with Mr. W. S. Richardson as judge. Gifts to two brides-to-be, cards to shut-ins and a box to a needy family are reported. Brompton Road held a flower show and social evening and articles were handed in for the Christmas sale. Lennoxville has re-decorated the club room. Mrs. A. E. Abercrombie gave a travel talk on "The Copenhagen Trip with the W.I." and \$3.58 went for support of the European child, a county project. Milby heard a report of the County W.I. booth at the Sherbrooke Exhibition by the assistant convenor of

Agriculture, Mrs. Charles Graham. An overseas parcel was sent. Orford also heard a report of the W.I. booth given here by the president, Mrs. B. Turner.

Stanstead: Ayer's Cliff won third prize at the inter-branch exhibit at the County Fair. New books were obtained for the Library, which is now operated by the W.I. The sum of \$20 was voted the Q.W.I. Service Fund and the monthly box sent to England. A spelling contest was arranged by the convenor of Education. Beebe won second place in the county exhibit. Over \$200 was realized from sale of handicrafts, food and tea. The sum of \$50 was voted the Q.W.I. Service Fund, \$20 to the Sherbrooke Hospital and \$10 to the Orleans County Hospital, Newport, Vt. Plans were made for the three week's course to be given by Miss Bruneau, at which the three branches of Beebe, Stanstead North and Tomifobia will participate. Plans are also under way for the formation of a Home and School Association. Hatley is planning a film showing. Fifty cents per member is to be paid the Agricultural Bursary, \$1 per member to the Q.W.I. Service Fund, and \$10 voted for prizes at school opening. The Massey Report is to be studied and reading matter has been sent to those in service in Korea. The Citizenship convenor read an article entitled, "Hoover's Ideas for Better Citizenship". Minton held a sale of cloth and a lively spelling contest was conducted by the convenor of Education, who also read an article entitled, "Lessons for Living". A sunshine basket was sent a sick friend. North Hatley has purchased a United Nations Flag. They also purchased equipment for swimming lessons in the Park including first aid materials and life-ring. Stanstead North won first prize at the county exhibit. This branch is giving a life membership to each of three older members still living who joined at the first meeting in 1928. Tomifobia voted \$10 to the Cancer Society. This branch also had an exhibit at the county fair. Way's Mill's gave a welcoming party and kitchen shower to a new Canadian recently arrived from Sweden, and gifts were given three young brides. A paper on "Stretching the Food Dollar" was given by Mrs. Smith and sample menus, provided by the Nutritional Division, Department of National Health and Welfare, were distributed.

Vaudreuil: Vaudreuil-Dorion gave a \$50 bursary to Miss Jacqueline Levesque of Dorion to help her complete her studies at the Normal School at Rigaud.



Another picnic scene, Vaudreuil-Dorion W.I.

Canadian Association of Consumers

(Extracts from Agricultural Report given by Mildred Summers)

During the past year the Canadian Association of Consumers has given information in their bulletins on the economy of using our own agricultural products in preference to imported produce. As well, they have advocated the use of powdered skim milk in preference to fluid milk because it is more economical.

CAC continues to be alert to grading and quality of some agricultural products. Also, it seems to me, the officers and executive have given more consideration to costs of production and distribution before opposing price increases of agricultural commodities. This attitude will contribute to a better understanding between rural and urban producers and consumers. However, there is a point I wish you to consider right here and it is: If producers and distributors of agricultural products must show need, by a thorough investigation of profits and costs by a commission before any increase in price is allowed, then like procedure should be followed with machinery, equipment and supplies used in agricultural production. By this, I mean it is fair that costs and profits in so far as they are concerned with farm machinery cars, trucks, feeds and fertilizers should all be as carefully scrutinized.

Mrs. Hugh Summers, wife of a dairy farmer, Fonthill, Ont., is president of the Federated Women's Institutes of Canada, a member of the board of directors of the Canadian Association of Consumers and chairman of its Agricultural Committee.

Milk continues to be in the limelight. During the past year dairies in Ontario have been thoroughly investigated. So far, I have not seen any complete report from the investigating Commission. However, following this investigation, Mr. J. E. Houck, Manager of the To-

ronto Milk Distributor Association, said the distributor's profit was only 1/5¢ per quart. So far there has been no denial of this statement by the Milk Commission. At 20¢ per quart this works out to a profit of \$1 per \$100. When one considers the money invested today in bonds or debentures is paying dividends of 3% to 4½% for doing no more than clipping coupons, I am sure you will agree this is not a large profit.

The Ontario Department of Agriculture has sent out a report on a survey conducted on 67 dairy farms in Oxford County. The findings make an interesting study, for they show farmer owner earnings far below the average. Especially is this so when one considers the heavy capital investment. In their summation this is said: "Those who did not place too much emphasis on dairying were better off. As the percentage of receipts from dairy increased the operator's earnings decreased". With this in mind it will be easier to understand the alarm voiced by the Ministers of Agriculture and their deputy ministers

all across Canada, at their recent annual meeting in Victoria, at the decline in milk production.

Here I wish to quote from a speech made by Mr. Stuart Keate, editor of the Victoria Times, at these meetings: "The average consumer has no idea what it costs to produce milk, meat or eggs. Perversely enough, he will tolerate a rise in price of almost every commodity except food. There is a very big job to be done in reconciling industry and agriculture. In the final analysis we all must work our way out by producing more. It is imperative that the industrial worker and the farmer go forward together for the guarantee of a prosperous and peaceful civilization".



CHRISTMAS SHORT COURSE AT COLLEGE December 27-31

The annual Short Course for people active in Community Organizations will be held again in Christmas Week at Macdonald College.

A feature of the afternoon program this year will be two parallel series of demonstrations — one likely to be of major interest to the men, on soils, animal husbandry and farm mechanics — the other, primarily for the women, on Household science and Handicrafts. Lectures, discussion sessions, films and recreation will also find a place in a varied program.

The course will open on Thursday, December 27th and close at noon on Monday, December 31. Students will live in the College residence. Cost of board for the period will be \$12.00.

Students 18 to 30 years of age are eligible for a Department of Youth scholarship to cover cost of transportation, plus \$5.00 toward board and room, providing they attend the complete course.

For further information, write Adult Education Service, Macdonald College, P.Q.



THE COLLEGE PAGE

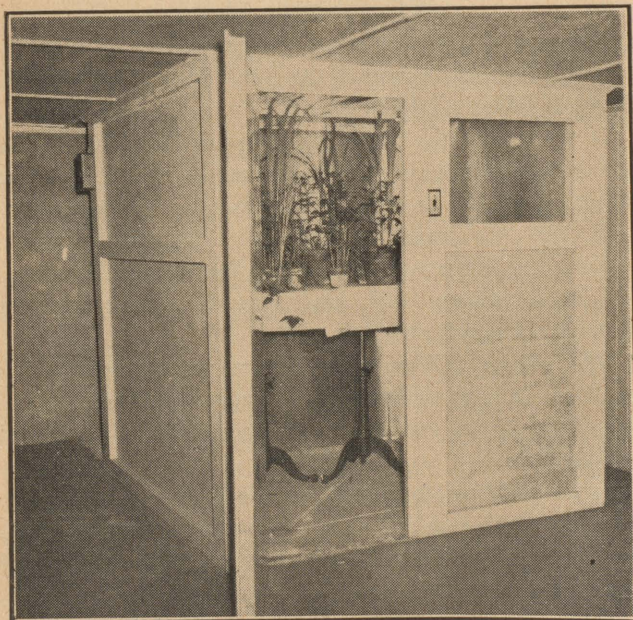
Another First for the College

The first of its kind in Canada, and one of the few on the continent, the newly-completed "underground greenhouse" of the Plant Pathology Department at Macdonald College is creating much interest among botanists and horticulturists.

Basic information about how plants grow, and how they resist or succumb to disease, is obtained by growing test plants under various conditions of light, moisture, temperature, fertilization, etc. Some of these tests can be carried out, or at least checked, under actual field conditions, but the fundamental work, necessary before any conclusions can be tested in the field, must be done where atmospheric and other conditions can be controlled.

It is usual for this kind of work to be done in a regular greenhouse, but even in the best built greenhouse, any climatic control can be only approximate. The investigator can alter his light conditions by turning on lights when it gets dark, but he can't provide a sunny day when he needs one, nor can he do much about keeping the house reasonably cool in the middle of summer. But in a building such as the one we are talking about, all these conditions can be controlled with a very high degree of accuracy.

This accurate control has been achieved by putting



Corn and potatoes growing in one of the new plant chambers.

the building which houses the plant chambers entirely underground, and by using artificial lighting only. By a cunning selection of bulb colours, this artificial light is almost exactly the same as sunlight, and plants in the chambers grow quite normally under it. The walls of the building are of cement and are insulated with cork, like a cold storage plant, so, summer and winter, there is not likely to be any great variation in the natural temperature within it. Inside the building are five plant chambers, built like big boxes: six feet square and six and a quarter feet high inside. The outside walls of the chambers are of asbestos building board; inside that is a two-inch layer of Fiberglass insulation, and the inside walls are of sheet aluminium. The ceiling is of glass and the lights are installed above this glass, putting them completely outside the insulated area, so there is no interference from the heat given off by the bulbs. Replacement of burned-out bulbs, and any other adjustments, can be done without opening the door of the chamber.

Four of the chambers have been placed within a section of the main room which is also insulated on all sides. This section can be refrigerated, and is run fairly cool at all times. None of the four individual chambers has any air-cooling system connected with it, but all can be cooled down to the temperature of the surrounding room in a very short time. For experiments where a temperature higher than that in the section is wanted, warm air is blown into the chamber in question. The reason for this rather unique arrangement is mainly one of convenience and economy, for it is easier to warm a chamber than to cool it.

The fifth chamber is located outside the refrigerated section, and this one will be run as a warm chamber where relatively high temperatures are to be maintained.

Where Does The Farmer Fit In?

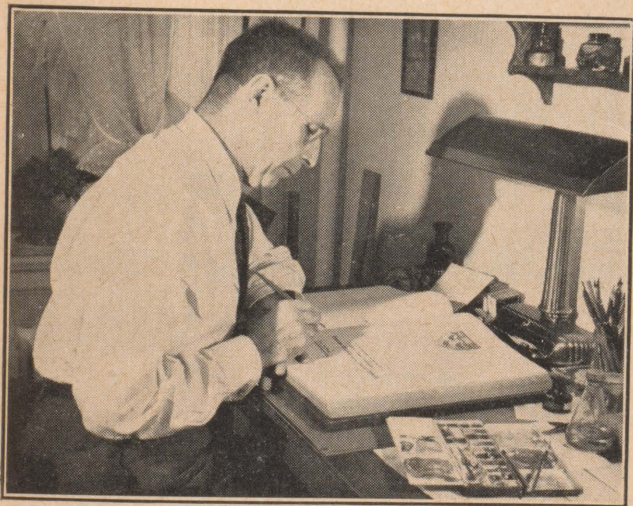
One may wonder just what advantage there is in growing a crop of something or other under such completely controlled conditions, when it is obviously impossible to control conditions for the crops that are grown out in the farmer's fields. But there is a connection, and a very definite one, between results that can be obtained in a plant chamber and results that can be obtained in the field. Take the problem of comparing different varieties of grain for disease resistance, for example. The way a variety has been grown before the testing starts may have quite an effect on the way in

which it will react to disease, and a test run on several varieties, some of which may have grown under quite different conditions to the others, may give results which are quite misleading. But in the chambers, all the varieties to be tested can be grown under exactly the same conditions, and so one chance of error is eliminated. And when the disease is introduced into the plants being tested, the investigator knows that its progress in the plants is not being interfered with by environmental factors.

Because these chambers have been in operation only a few weeks, there has not been time to do very much with them as yet. But there are a number of things for which they will be useful. Since they are lighted artificially, it is no trick at all to convert one of them into a miniature cold storage plant for the investigation of storage problems. They are completely airtight, and so can be used to study gas storage, or the effects of various gases on plant growth. (Farmers living near certain types of industrial plants will understand the importance of this). They can be used for studies on winter hardiness, dormancy in seeds, and for many other purposes. The adaptability of any variety of vegetable or field crop to the short-day conditions found in the northern part of the country can be checked on without difficulty. In fact, there appears to be no limit to the information that can be obtained, and it is probable that every chamber will be in constant use for many years to come.

Mac Boys Go with the C.B.C.

Two former classmates at Macdonald College, Murray Creed and Frank Nicholson, both of whom graduated in 1949, have taken over responsibility for farm broadcasting in the Maritimes for the Canadian Broadcasting Corporation. Creed has been named farm broadcast commentator, replacing Keith Morrow who has been promoted to the post of supervisor of farm broadcasts for the C.B.C., and Nicholson will be assistant to Creed.



When Princess Elizabeth and Prince Philip visited McGill, they signed this book, which also contains the signatures of all the men and women who have received honorary degrees from the University. Shown preparing the inscription is Walter Whitehead of our staff, whose photographs and sketches have often appeared in the *Journal*.



*"Beats the old team
any day, Dad"*

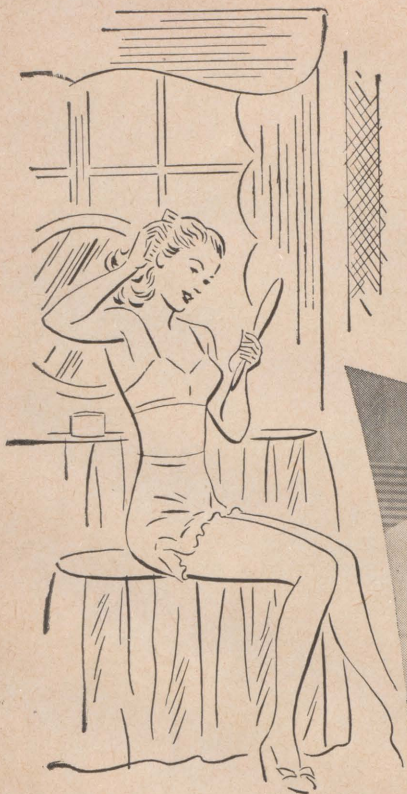
AWHILE back, he figured out just what a new tractor would do for his farm. He didn't have enough cash in the bank to handle the deal. So he talked things over with his bank manager, fair and square. He got his bank loan — and the tractor. From now on, he expects to work more acreage, increase his farm income. Soon the bank will be repaid.

He looks to his chartered bank for market information, too, and any other banking service he may need.

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